THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. A device for communicating electric signals across the skin layer of a patient, wherein said device includes: an electrically conductive core capable of forming an EMF flux loop; first and second coils, which are in EMF communication with said electrical conductive core and wherein said first coil is positioned externally to said patient and surrounds at least a first portion of said electrically conductive core; and said second coil is implanted beneath or in said skin layer and surrounds at least a second portion of said electrically conductive core.
2. The device as claimed in claim 1, wherein said electrically conductively core is implanted at least partially within said skin layer.
3. The device as claimed in claim 1, wherein said electrically conductively core is formed in a loop or ring-like configuration.
4. The device as claimed in claim 3, wherein said electrically conductively core does not breach an outer surface of said skin layer.
5. The device as claimed in claim 1, wherein said device includes a sleeper ring to interact with said first coil.
6. The device as claimed in claim 1, wherein said device includes a textured surface on at least a portion of said electrically conductively core.
7. The device claimed in claim 1, wherein said electrically conductive core is encapsulated within said skin layer.
8. The device as claimed in claim 1, wherein said device includes a layer of protective material surrounding at least a portion of the electrically conductive core.